



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0098; Project Identifier MCAI-2021-01084-T; Amendment 39-22032; AD 2022-09-12]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus SAS Model A350-941 and -1041 airplanes. This AD was prompted by a report indicating that on the A350 final assembly line (FAL), certain load sensing drive struts (LSDS) and drive struts (DS) were found not adjusted (the nut was not torqued) and not locked. Investigation revealed that the LSDS and DS had been changed as re-work action due to pre-installation damage, but production operations (adjustment and locking) were not done afterwards. This AD requires, for certain airplanes, inspection of the LSDS for correct adjustment and locking, and replacement if necessary, and, for certain other airplanes, replacement of each affected DS with a serviceable part, as specified in a European Union Aviation Safety Agency (EASA) AD which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For material incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0098.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0098; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225; email dan.rodina@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0220, dated October 1, 2021 (EASA AD 2021-0220) (also referred to as the MCAI), to correct an unsafe condition for certain Airbus SAS Model A350-941 and -1041 airplanes.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus SAS Model A350-941 and -1041 airplanes. The NPRM published in the *Federal Register* on February 10, 2022 (87 FR 7765). The NPRM was prompted by a report indicating that on the A350 FAL, LSDS track 1 and DS track 2 were found not adjusted (the nut was not torqued) and not locked. Investigation revealed that the LSDS and DS had been changed as re-work action due to pre-installation damage, but production operations (adjustment and locking) were not done afterwards. The NPRM proposed to require, for certain airplanes, inspection of the LSDS for correct adjustment and locking, and replacement if necessary, and, for certain other airplanes, replacement of each affected DS with a serviceable part, as specified in EASA AD 2021-0220.

The FAA is issuing this AD to prevent degradation of the load-carrying capability of an LSDS or DS, which could result in the in-flight detachment of a flap, resulting in structural damage and reduced controllability of the airplane. See the MCAI for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from the Air Line Pilots Association, International (ALPA), and an individual, who supported the NPRM without change.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

Related Service Information Under 1 CFR Part 51

EASA AD 2021-0220 describes procedures for a detailed inspection of the LSDS for correct adjustment and locking, and replacement of the LSDS if any discrepancy (movement of either nut) is found, for airplanes in Configurations 1 through 4. The service information also describes procedures for replacement of each affected DS with a serviceable part, for airplanes in Configurations 5 and 6. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 6 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
LSDS inspection: Up to 14 work-hours X \$85 per hour = Up to \$1,190	\$0	Up to \$1,190	Up to \$7,140 (6 airplanes)
DS replacement: Up to 11 work-hours X \$85 per hour = Up to \$935	Up to \$84,470	Up to \$85,405	Up to \$85,405 (1 airplane)

The FAA estimates the following costs to do any necessary on-condition LSDS replacement that is required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need this on-condition replacement:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
Up to 10 work-hours (2 per LSDS) X \$85 per hour = Up to \$850	Up to \$76,173	Up to \$77,023

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in the cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-09-12 Airbus SAS: Amendment 39-22032; Docket No. FAA-2022-0098; Project Identifier MCAI-2021-01084-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2021-0220, dated October 1, 2021 (EASA AD 2021-0220).

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by a report indicating that on the A350 final assembly line (FAL), certain load sensing drive struts (LSDS) and drive struts (DS) were found not

adjusted (the nut was not torqued) and not locked. Investigation revealed that the LSDS and DS had been changed as re-work action due to pre-installation damage, but production operations (adjustment and locking) were not done afterwards. The FAA is issuing this AD to prevent degradation of the load-carrying capability of an LSDS or DS, which could result in the in-flight detachment of a flap, resulting in structural damage and reduced controllability of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2021-0220.

(h) Exceptions to EASA AD 2021-0220

(1) Where EASA AD 2021-0220 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where paragraph (2) of EASA AD 2021-0220 refers to a “discrepancy, as defined in the SB,” this AD defines a discrepancy as movement of either nut.

(3) The “Remarks” section of EASA AD 2021-0220 does not apply to this AD.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2021-0220 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with

14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (j)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) Related Information

For more information about this AD, contact Dan Rodina, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225; email dan.rodina@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2021-0220, dated October 1, 2021.

(ii) [Reserved]

(3) For EASA 2021-0220, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to:

<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on April 20, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2022-10525 Filed: 5/16/2022 8:45 am; Publication Date: 5/17/2022]